

REMARKS*Regarding Claim Status*

5 Claims 1-15 and 18-32 were pending. Claims 1-15 and 18-32 were rejected. Claims 1 and 24 are amended herein. Support for the amendment can be found in the specification as originally filed, particularly on page 17, lines 1-4, regarding the local content grouping. No new claim is added. No new matter is introduced. By this Amendment, claims 1-15 and 18-32 are pending.

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Regarding 35 U.S.C. § 112, Second Paragraph, Rejections

15 Claims 1-15, 18-29 and 31 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particular point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the phrase “determining [a] local content grouping near each title extracted” was deemed confusing.

The examiner understood the phrase as meaning either “combining different forms of the same terms,” or “collecting different type [*sic*] of information associated with an identified term.”

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It is respectfully submitted that neither understandings is correct.

The pertinent teaching in the specification on page 17, lines 1-4, is repeated below in part:

25 “...the parser **140** first makes a determination of a local content grouping near the title that is associated with that title by using tags and keywords as boundary markers. Once a local content grouping near the title is identified, identification and extraction of a name, for example, can take place only in the local content grouping.”

30 Therefore, step c) of claim 1 neither combines different forms of the same terms nor collects different types of information associated with an identified term.

Generally, in step a), the computer of the present invention (any computer implemented with a Web spider **130** [Spec. page 14, lines 4-9]) “mines” the vast Internet for particular files that contain the information we want, in this case, senior management names, titles, contacts, etc.

5 In step b), only the titles are extracted from the files. In step c), the computer determines, for each title extracted in step b), a local content grouping near and associated with a particular title. Step c) identifies/establishes/marks the boundaries where step d) will take place, i.e., to identify and extract a name associated with a particular title. In other words, step c) associates and binds a content local to a title. It is from this local content a name associated

10 with that title is to be extracted in step d).

Steps b), c), and d) of claim 1 are particularly amended herein to obviate the confusion and are therefore respectfully submitted to have overcome the rejection under 35 U.S.C. § 112, second paragraph.

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Regarding 35 U.S.C. § 101 Rejections

Claims 1-15 and 18-28 were rejected under 35 U.S.C. § 101 as being related to non-statutory subject matter. More specifically, the examiner deemed these claims to be directed to an

20 abstract idea without reciting a limitation in the technological arts.

Step a) of claim 1 explicitly recites, “searching the Internet”, among others. A human user cannot search the Internet without a user interface such as a Web browser application. The specification of the above-identified application does not teach and claim 1 does not merely

25 recite an abstract idea. It is notoriously known in the art that the Internet does not exist in the physical world but only in the digital world. Thus, the act of actually “searching the Internet to identify and obtain files” is not an abstract idea and must be done by a computer programmed to perform such a search, e.g., via a Search Engine and/or Spider **130** [*id.*].

30 It is unequivocally clear, and would have been unquestionably clear to one skilled in the art at the time of the invention, that the present invention cannot “be performed mentally without

interaction of a physical structure,” as the Office action as alleged.

Moreover, the World Wide Web (WWW or Web), like the File Transfer Protocol (FTP), is one of the many protocols in the Internet infrastructure. Applicants respectfully disagree with the statements that “searching the Internet to identify and obtain files may be understood as merely browsing the Internet” and that “browsing the Internet”, among other steps, “may be understood as mentally analyzing the Web content without using a computer.” Citations of literature support for these statements are respectfully requested (i.e., evidence that one skilled in the art would have understood as stated.)

35 U.S.C. § 112, second paragraph, requires that the claims particularly point out and distinctly claim subject matter which the inventor regards as the invention. Adding limitations such as “browsing” and “without using a computer” that are not recited in the claims is neither permissible nor reasonable.

In other words, the examiner correctly assumed that claim 1 and its dependent claims 2-15 and 18-28 inherently recite statutorily permitted subject matter.

The applicability of 35 U.S.C. § 101 notwithstanding, the preamble of claim 1 is amended herein to make the implicit explicit, i.e., the invention is a computer-implemented method, thereby rendering the pertinent rejections moot.

Regarding 35 U.S.C. § 103 Rejections

Claims 1, 5-10, and 13-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Baker et al. (U.S. Pat. No. 6,338,067, hereinafter referred to as “Baker”) in view of Wical (U.S. Pat. No. 6,061,675). Claims 2-4, 30, and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Baker and Wical in view of Johnson et al. (U.S. Pat. No. 6,553,385, hereinafter referred to as “Johnson”). Claims 12 and 18-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Baker and Wical in view of Lawrence et al. (U.S. Pat. No. 6,289,342, hereinafter referred to as “Lawrence”). Claim 15 was rejected under 35 U.S.C. §

103(a) as being unpatentable over Baker and Wical in view of Maddalozzo, Jr. et al. (U.S. Pat. No. 6,460,060, hereinafter referred to as "Maddalozzo"). Claims 25-26 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Baker and Wical in view of Yong (U.S. Pat. No. 6,560,606). Claim 27 was rejected under 35 U.S.C. § 103(a) as being
5 unpatentable over Baker, Wical, and Maddalozzo in view of Yong.

Of the above-cited references, Wical (in its later reincarnation), Johnson, Lawrence, Maddalozzo, and their various combinations had been cited in the previous Office actions. Applicants have duly presented counter arguments why these prior inventions, especially
10 Wical, individually and in various combinations, do not teach or suggest the invention as set forth in the claims. Since these references were again cited in the present Office action and since prior arguments pertaining to these references have not been disputed, these prior arguments are still pertinent to the rejections stated in the present Office action and therefore are incorporated herein by reference.

15 If it is the examiner's considered opinion that the asserted differences and advantages over these previously cited references, especially Wical, are without significance in determining patentability of the rejected claims, it is respectfully requested that the examiner states the reasons for his position in the record. By so doing, Applicants will know that the asserted
20 differences and unobvious advantages have actually been considered by the examiner and, if appeal is taken, the Board of Patent Appeals and Interferences will also be advised.

The importance of answering such arguments is illustrated by *In re Herrmann*, 261 F.2d 598, 120 USPQ 182 (CCPA 1958) where the applicant urged that the subject matter claimed
25 produced new and useful results. The court noted that since applicant's statement of advantages was not questioned by the examiner or the Board of Appeals, it was constrained to accept the statement at face value and therefore found certain claims to be allowable. *See also, In re Soni*, 54 F.3d 746, 751, 34 USPQ2d 1684, 1688 (Fed Cir. 1995) (Office failed to rebut applicant's argument).

The rejections are collectively traversed in view of the following remarks with respect to the independent claims 1 and 30.

5 Baker, the rest of the secondary references, and their various combinations are hereby categorically distinguished because they are directed to information retrieval and lack teachings on information discovery as set forth in the claims, in addition to arguments presented in the previous Replies.

10 Step a) of claim 1 explicitly recites, “**searching the Internet to identify and obtain files containing senior management information.**” This step is realized in the system claim 30 with a search means and an integrity evaluation means. As more specifically taught in the application disclosure, this step is performed by a specially developed search engine/spider **130** (implemented in a computer, *supra*, citation omitted).

15 The present invention does not generally claim information discovery over the Internet using search engines/spiders. These are enabling technologies of the present invention. What is new and unobvious is how particular senior management information is identified/discovered (over the Internet), retrieved (from the Internet), processed, analyzed, and presented via the steps and means recited in the claims (inherently all done by computer modules/components
20 such as spider **130**, parser **140**, etc.).

It is known that the Internet exists in the digital world. The Web makes the Internet more “user friendly” with human-readable Web pages written in non- or semi-structured computer languages such as the hypertext markup language (HTML). Obviously, these are not
25 “machine search friendly” files. That is, identifying/discovering valuable information from Web pages faces different technical challenges than from retrieving highly structured data from a relational database.

30 The present invention provides a viable technical solution that intelligently integrates different components and techniques, e.g., determining a local content grouping within a file near a title extracted from that file (step c)), and evaluating a past tense relationship of the

name and title, which are associated by the same local content grouping (steps d)-e)). These steps advantageously generate accurate results in a substantially more efficient and effective manner, overcoming at least the difficulty of having search engines/spiders reading and understanding human-friendly files.

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Baker teaches information **retrieval** from a relational database **112** with an *a priori* known structure [see, Tables I and II, Quantitative Information]. That is, Baker retrieves information embedded with a known structure. For example, Baker already has the value of the strings of text stored in the relational database **112**.

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On the other hand, as is well known in the art, there is NO structural uniformity across Web pages available on the Internet. Thus, the present invention has to determine the value of a string of text. To do so, the context in which that string occurs has to be first discovered/determined. To discover the context, the structure of the file, which was not readily available at the first place, must first be determined/discovered. With these logically connected steps (implemented by the system means), the desired information (in this case, senior management information) is made valuable due to the discovery of the context within which it occurs (think “local content grouping”).

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20 The present invention is therefore an intelligent information **discovery** process and system, integrated with information **retrieval** (i.e., searching the Internet to identify and obtain files containing senior management information), and information processing and analyzing, among others, as set forth in the present claims.

25 Baker does not teach, nor does Baker have to solve, how to discover and process Internet files containing vast information with unknown structure. This is a significant technological difference between Baker and the claimed invention.

30 Other important technological differences between Baker and the claimed invention include:

1. Files stored in the relational database 112 are meant to be computer-readable; whereas the Internet files of the present invention are meant to be primarily human-readable.
2. Baker's relational database 112 is a single source accessible via the Internet [col. 3, lines 23-25]. Baker searches the database and merely uses the Internet as a communication channel, retrieving structured data over the Internet. Baker does not "search the Internet to identify and obtain files containing senior management information." This is a fundamental, patently distinct difference.
3. Baker has control (e.g., insert/delete) over the single relational database it uses as a data repository. The claimed invention does not have any such control over the data content it accesses over the Internet.
4. Hyper-text linkages on the Internet are not available in a tabular form anywhere and do not have a relational database structure due to issues related to duplicity, loop references, etc.
5. Information available in files on the Internet can change structure in both time and place. Baker does not teach information retrieval or information discovery from a file that could possibly change structure and content in time and place.
6. Baker provides access to already compiled data stored in a single database. Baker does not teach information retrieval and/or information discovery from a huge disorganized data repository such as the Internet containing all types of files.

Note the word "files" as taught and claimed in the present application is **very different** from "records" in a relational database as in Baker. The two cannot be compared.

Patent Examiners must rely on the applicant's disclosure to properly determine the meaning of terms used in the claims. Markman v. Westview Instruments, 52 F.3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir.) (en banc), aff'd, U.S., 116 S. Ct. 1384 (1996) (emphasis added).

A record in a relational database has a very specific structure that is known *a priori*. It is well known in the art that a relational database is characterized by its structure. Retrieving

information from a relational database, as in Baker, is simply a matter of accessing a known structure with known and formalized query mechanisms. There is simply no need to “discover” the structure of data stored in a relational database.

5 Wical is cited for classifying terminology utilizing a structured database. The inapplicability “IsWhatTense” of Wical [col. 78, lines 14-15] has been specifically submitted in the previous Reply and thus is not repeated here. Both Baker and Wical retrieve and evaluate structured data from structured databases. Therefore, neither Baker nor Wical teaches or suggests how to discover and parse disorganized Internet files, i.e., files with *a priori* unknown structure.

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For the foregoing reasons, the combined teachings of Baker and Wical, assuming a proper motivation to combine, simply cannot arrive at the invention as set forth in the present claims. Accordingly, it is respectfully submitted that the claimed invention readily overcomes the combination of Baker and Wical, as well as other Baker-Wical based combinations alleged in the Office action.

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Conclusion

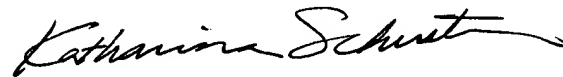
Applicants respectfully submit that the claimed invention as set forth in the independent claims 1 and 30 recites subject matter not reached by the closest prior art of record, individually and in combination, and therefore should be allowed. Reliance is placed on *In re* Fine, 5 USPQ 2d 1596, 1600 (Fed. Cir. 1988) and *Ex parte* Kochan, 131 USPQ 204 (Bd. App. 1960) for allowance of the dependent claims 2-15, 18-29, and 31-32, since they differ in scope from their parent independent claims which are submitted to be patentable.

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This Response/Amendment is submitted to be complete and proper in that it places the present application in a condition for allowance without adding new matters. Favorable consideration and a Notice of Allowance of all pending claims are earnestly solicited.

The Examiner is sincerely invited to telephone the undersigned at 650-331-8413 for **clarification or any suggested actions** such as an Examiner's Amendment to accelerate prosecution and forward the present application to allowance.

Respectfully submitted,



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